University Reactor Fuel Assistance and Support

To meet the commitment to help U.S. university and colleges stay at the forefront of science education and research, the Office of Nuclear Energy, Science and Technology University Program assists universities in the operation of research reactors and in the performance of other educational activities. Direct support is provided to 47 educational institutions in 28 states. The program includes the following elements:

Reactor Fuel Assistance. The Department provides fresh fuel to, and takes back spent fuel from, university research reactors. There are currently 29 university research reactors at 27 institutions in the United States. These reactors are some of our greatest resources in the effort to improve technical education, and are used for a variety of research, educational and training purposes.

Nuclear Engineering Education Research Grants. The Department re-established, in FY 1998, a competitive, peer-reviewed program to provide grants allowing nuclear engineering faculty and students to conduct innovative research in nuclear engineering and related areas. This type of research is vital to the academic community to help promote excellence in nuclear engineering and provide resolution to issues confronting nuclear engineering in general.

DOE/Industry Matching Grants. The Department of Energy and participating companies provide matching funds, up to $50,000 each, to universities for use in funding scholarships, improving nuclear engineering and science curricula, and modernizing experimental and instructional facilities.

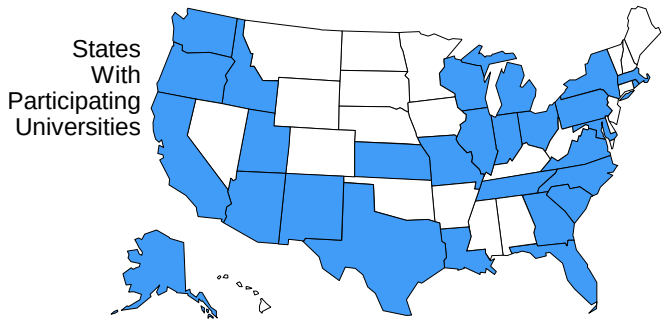
Nuclear Engineering/Health Physics Fellowships and Scholarships, and Minority Fellowships and Scholarships. The Department provides tuition, stipends, and practicums to outstanding graduate students studying nuclear engineering and health physics and undergraduate scholarships and practicums to students pursuing a nuclear engineering course of study to ensure that our country will have an adequate supply of trained nuclear scientists and engineers. The Department also supports development of education programs in nuclear engineering and related scientific fields at Historically Black Colleges and Universities and other minority institutions.

Reactor Sharing. Through this assistance effort, the Department enables universities with reactors to "share" them with students and faculty at other institutions who lack such a facility. The reactors are made available for use in research, experiments, training, and for facility tours and other educational activities.

Reactor Upgrades. The Department is providing assistance to universities to improve the operational and experimental capabilities of their research reactors. Grants are provided to the universities to purchase equipment and services necessary to upgrade the reactor facilities, such as reactor instrumentation and controls, data recording devices, and radiation monitoring equipment.

Radiochemistry. The Department awards grants in the field of radiochemistry to enhance the viability of radiochemistry education in the United States. Radiochemistry is linked to several national priorities including medicine, energy and national defense.

Nuclear Engineering and Science Education Recruitment Program. This program is designed to increase the number of university students entering a nuclear engineering course of study by developing a core curriculum to instruct science teachers in nuclear science and engineering topics.



Program Participants

Clemson University
Cornell University
Georgia Institute of Technology
Howard University
Idaho State University
Jackson State University
Kansas State University
Lincoln University
Louisiana State University
Massachusetts Institute of Technology
Morgan State University
Morris College
North Carolina State University
North Carolina A&T State University
North Carolina Central University
Ohio State University
Oregon State University
Pennsylvania State University
Prairie View A&M University
Purdue University
Reed College
Rensselaer Polytechnic Institute
Rhode Island Nuclear Science Center
Tennessee State University
Texas A&M University
University of Alaska-Anchorage
University of Arizona
University of California-Berkeley
University of Cincinnati
University of Florida
University of Illinois
University of Maryland
University of Massachusetts-Lowell
University of Michigan
University of Missouri-Columbia
University of Missouri-Rolla
University of New Mexico
University of Tennessee
University of Texas
University of Utah
University of Virginia
University of Wisconsin
Virginia State University
Washington State University
Worcester Polytechnic Institute
Xavier University of Louisiana

FY 1999 Accomplishments

- Supplied fresh fuel to multiple university reactors and ship spent fuel from these reactors.
- Completed conversion of a university research reactor from high-enriched uranium to low-enriched uranium and begin conversion of another reactor.
- Provided matching grants to 21 universities to support education, training, and innovative research. DOE matches this funding dollar for dollar with private industry.
- Provided 22 fellowships and approximately 67 scholarships to outstanding and promising United States M.S., and Ph.D. students engaged in nuclear science research and training at multiple U.S. universities and Historically Black Colleges and Universities and other minority institutions.
- Continued community outreach through the reactor sharing program to allow students and faculty from institutions without reactors access to 22 of our university reactors for training, education, and research.
- Continued a second year of the reactor upgrade program at 22 universities to assist in alleviating the backlog of maintenance and upgrade items confronting university-owned research reactors.
- Expanded the Nuclear Engineering Education Research (NEER) Grants Program and continued to fund the second year of the grants awarded in FY 1998. There were 39 NEER grants supported during FY 1999.
- Provided assistance in the form of graduate, postgraduate, and faculty awards to students pursuing a career in radiochemistry at three U.S. universities offering this course of study.

FY 2000 Planned Accomplishments

- Provide fuel to multiple university reactors and ship spent fuel from reactors.
- Provide matching grants to approximately 20 universities.
- Provide 22 fellowships and 62 scholarships to outstanding and promising United States M.S., and Ph.D. students engaged in nuclear science research and training at multiple U.S. universities and Historically Black Colleges and Universities and other minority institutions.
- Maintain reactor sharing program at 26 universities.
- Provide reactor upgrade grants at 22 or more university reactors.
- Provide second and third year funding for previous NEER grantees and award a small number of new grants.
- Begin program to assist the recruitment of nuclear engineers by exposing students to nuclear science and education through teacher training and workshops.
- Continue to provide faculty support and student fellowships and scholarships to help educate a new generation of radiochemists to address technical challenges associated with radioactive waste and contaminated sites.

Program Budget
(in millions)

FY 1998 Appropriation	FY 1999 Appropriation	FY 2000 Appropriation
$7.0	$11.0	$12.0